
UTAH DEPARTMENT OF TRANSPORTATION

TECHNICAL BULLETIN MT-05.09A

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Nuclear Gauge Certification

Nuclear Gauges provide accurate measurements of moisture content and density of construction materials such as soil, aggregate, and asphalt. The Utah Department of Transportation has 49 gauges in storage and 90 gauges in operation throughout the regions. The purpose of this bulletin is to provide information for the process involved to obtain and maintain nuclear gauge certification.



GAUGE CERTIFICATION PROCESS

Any individual that has the responsibility of **using or transporting** the nuclear density gauge must be certified. The certification is separated into two fields. The first is safety training and the second is gauge certification.

The first step in the process requires the individual to contact their Region Radiation Protection Officer (RPO). The safety training requires the individual to participate in a training session conducted by the RPO, then take a short test. Once the individual receives the safety training, the RPO provides a certification and the technician is ready for gauge certification. The Region RPO can assist in this training through the On The Job Training Program (*see MOI section 1014 at http://www.udot.utah.gov/download.php/tid=644/1014_sec5%20.pdf*) providing hands on instruction. The instruction received through the TTQP Sampling, Reduction and Density Qualification (SRDTT) or the Embankment, Base and In-place Density Qualification (Eb/DTT) requires the individual to demonstrate proper test site preparation and gauge functions as well as a review of safety, transportation and care of equipment topics, and fulfills the requirement for gauge certification. A 90 day window has been established to allow the student sufficient time to schedule and complete training on gauge functions for the next step in certification. If the 90-day window elapses and an individual has not completed the gauge certification, the safety certification may be revoked.

OTHER INFORMATION

The Division of Radiation Control (DRC) mandates safety training and an annual safety refresher for all certified gauge users. Gauge certification is required every five years through the TTQP. All safety training can be scheduled with the Region RPO's.

Fines may be assessed and all work may be stopped if the DRC becomes aware of any non-certified individuals transporting or using a nuclear gauge. The Central RSO and RPO's have the right to revoke the certification of any individual not following proper procedure while operating a gauge.

RELATED INFORMATION

To perform density tests on construction projects the individual needs a current UDOT TTQP SRDTT or Eb/DTT qualification. Check with your supervisor to determine which qualification best fits your needs. To keep these qualifications current the technician is required to meet the requirements of the Independent Assurance Program as outlined in Materials Manual of Instruction, section 1012.

(http://www.udot.utah.gov/download.php/tid=644/Independant_Assurance_8-1012.pdf)

Any questions regarding UDOT TTQP qualifications should be directed to Desna Bergold.

A listing of all current nuclear safety certifications can be found at the following website

<http://168.178.125.73/mtl/nucsafety.asp>

Gauge certifications can be found at the following website.

<http://www2.udot.utah.gov/index.php/m=c/tid=978>

FURTHER INFORMATION

For additional questions regarding nuclear gauge certification contact either:

Central Materials Contacts:

Graham Starkie - Phone # 965-4202 or email Gstarkie@utah.gov, or

Desna Bergold – Phone # 964-4512 or email Dberbold@utah.gov

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Region RPO Contacts:

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